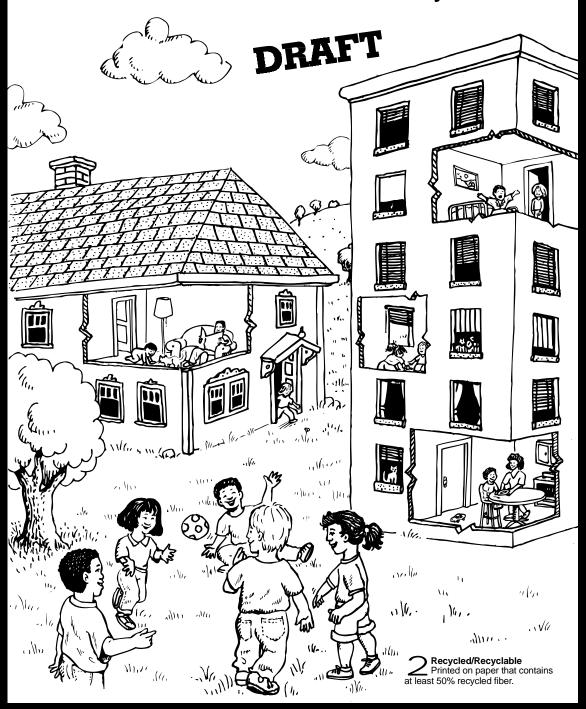
United States Environmental Protection Agency Docket No. OPPTS-62133 March 1994

Pollution Prevention and Toxics

### **\$EPA**

## **Lead-Based Paint**

**Protect Your Family** 



## Notice

This draft pamphlet is being circulated for review and comment only. It should not be quoted or cited. As a draft, it has not yet been subject to all required EPA policy and/or technical reviews and is subject to revision. The final pamphlet should be available to the public in the fall of 1994.

To comment on this draft pamphlet, please submit three copies of written comments to:

U.S. Environmental Protection Agency TSCA Document Receipts (7407) Room G-099 Office of Pollution Prevention and Toxics 401 M Street, SW. Washington, DC 20460

Please identify the pamphlet using the docket number **OPPTS-62133** on all submitted comments.

### **Important!**

#### Lead-based paint in your home, whether you live in a house or apartment, may be a hazard:

- If you have children younger than six or you are planning to have children.
- If the paint is peeling or chipping, is on surfaces that rub together (such as windows or doors), or is on surfaces that a child can chew.

ead poisoning can cause serious, permanent harm to children.

Many homes built before 1978, and most homes built before 1960, have lead-based paint.

If your home has lead-based paint, you can take some simple steps to protect your family.

Pemoving lead-based paint yourself is likely to increase the danger to yourself and your family.

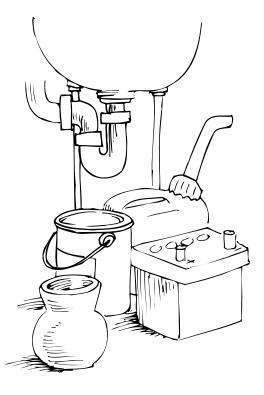
If you are buying or renting housing that was built before 1978, you have certain rights, including the right to specific information on lead-based paint in the home (see page 14).



## **Lead-Based Paint: Protect Your Family**

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### What Is Lead?

Lead is a soft, bluish metal found in the Earth's crust. Manufacturers have used lead in many different products, including paint, batteries, water pipes, solder, pottery, and gasoline.

Because of the dangers of lead, some uses of lead are no longer allowed. New house paint is almost lead free, most household plumbing is no longer made of lead materials, and leaded gasoline is being phased out.

But one-sixth of all children in the United States still have high levels of lead in their blood.

#### **How Is Lead Harmful?**

Even very small amounts of lead can cause permanent harm.

#### Children who are lead poisoned can suffer from:

- Damage to the brain and nervous system, which may cause behavior and learning problems.
- Slowed growth.
- · Hearing problems.
- · Kidney damage.

#### Children are more sensitive than adults to small amounts of lead, for three reasons:

- Children absorb more lead than adults do.
- Children's brains and nervous systems are still developing.
- Babies and young children put everything in their mouths! The toy, hand, or other object that goes into your child's mouth could have fine lead dust on it.



Even children who appear healthy may have lead poisoning. The only way to find out is to have your child tested. (Lead poisoning is detected with a simple blood test.) Check with your pediatrician or local health clinic. The sooner lead poisoning is discovered, the sooner you can find and get rid of the source of the lead, and the sooner your child can get medical treatment, if needed.

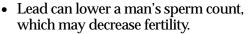
Get your child tested for the first time when he or she is **one year old**, or at **six months old** if your home was built before 1978 and has chipping or peeling lead-based paint, or if you use lead in your job or hobby.

Children **older than one year** should be tested every year until age six if your home was built before 1978 and contains chipping or peeling lead-based paint, or if you use lead in your job or hobby.

## Lead poisoning also causes health problems in adults.

Lead can affect the ability of both women and men to have healthy children.

• If a woman is exposed to high levels of lead before or while pregnant, the fetus could be harmed.





High lead levels can cause other health problems in adults, including high blood pressure, headaches, digestive problems, memory and concentration problems, kidney damage, mood changes, nerve disorders, sleep disturbances, and muscle or joint pain.



## Why Is Lead-Based Paint a Problem?

Lead-based paint is found in **most** homes that were built before 1960, and in **many** homes that were built before 1978. This is true whether the home is in a low-income or wealthy neighborhood, or whether it is in







the city,

the country,

or the suburbs.

Lead-based paint is often found in older private homes. In addition, some of the nation's public housing was built before 1960 and therefore may contain lead-based paint.

Surfaces that often have lead-based paint include:

- Windows and window sills.
- · Doors and door frames.
- Stairs, railings, and banisters.
- Woodwork, molding, and baseboards.
- Walls.
- Porches and fences.
- Shingles.



Intact lead-based paint—paint that is not peeling, chipping, chalking, or cracking—is usually not a hazard, except on surfaces that children can chew on (such as

window sills) or on surfaces that children can chew on (such a window sills) or on surfaces that rub together.

Lead-based paint that is not intact can be a hazard.

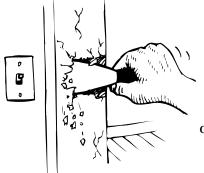
People are exposed to lead not only through the paint chips and flakes that you can see, but also through the fine **lead dust** that forms

as the paint peels,



as the paint undergoes normal wear and tear (especially on doors, windows, and baseboards),





or when it is scraped, sanded, or heated (as during renovations).



This lead dust can get on carpets, floors, furniture, toys, and other objects, as well as on the hands of children and adults in the home.

When children put their hands, toys, or other objects in their mouths, the lead dust gets into their bodies.

## What If You Suspect Your Home Has Lead-Based Paint?

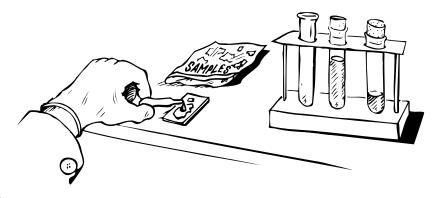
If your house or apartment was built before 1978—and especially if you have children six years old or younger, or you are planning to have children—you should have your home tested for lead-based paint.

Make sure that a trained inspector tests your home. (The results you get by using "do-it-yourself" testing kits are not as reliable.) To find a trained inspector, contact your state agency, listed in the back of this brochure (or call the National Lead Information Center Hotline at 800-LEAD-FYI for the most up-to-date list of state agencies).



A certified inspector will test the surfaces of your home using either of these methods:

- Laboratory tests of paint samples. This is currently considered the most accurate testing method.
- A portable x-ray fluorescence (XRF) machine that measures the amount of lead in the paint. When used properly, this method can provide good results.



## What If Your Home Does Have Lead-Based Paint?

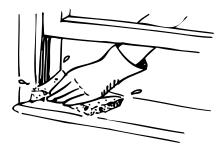
If lead-based paint is in good condition, is not in a place where surfaces rub together, and is not in a place where children can chew on it, it is probably not a hazard. In that case, you do not need to do anything except watch for future deterioration (such as peeling, flaking, or chipping).

#### What Are Some Short-Term Solutions?

There are a number of short-term measures you can take to protect your family. If you have young children or are planning to have children, the following measures are especially important:

## Regularly clean floors, window wells, window sills, and other surfaces. Use a

high-phosphate dishwasher detergent or trisodium phosphate (TSP), available in hardware stores, dissolved in warm water. (Phosphate detergents and/or TSP may be banned in some states. Check with your state agency.) Wear gloves to avoid possible skin irritation.



#### Be alert to chipping and flaking paint.



**Wash children's hands often,** especially before they eat and before nap time and bed time.

Make sure children eat well-balanced meals, high in calcium and iron. A child who gets enough calcium and iron will absorb less lead.



Wash off bottles and pacifiers after they fall on the floor.

Wash toys and stuffed animals regularly.



Make sure children do not chew on window sills or other surfaces covered with lead-based paint.

#### How Can You Permanently Eliminate Lead-Based Paint Hazards in Your Home?

Taking short-term measures to reduce the hazards of lead-based paint in your home is important. To solve the problem permanently, you should hire a **professional lead abatement firm.** 

"Abatement" means permanently eliminating lead-based paint hazards. (Just covering lead-based paint with nonlead-based paint will not solve the problem.) Individuals who work for a professional lead abatement firm are trained to use safe abatement methods.

## While you might want to save money by removing lead-based paint yourself, this is not a good idea. Using unsafe techniques to remove lead-based paint can increase the danger to you and your family.

Call the National Lead Information Center Clearinghouse (800-424-LEAD) to find out how to locate a professional lead abatement firm. To avoid any potential conflict of interest, it's best to use a different firm for abatement than the one that tested your home for lead.

Some states give grants or tax credits to help homeowners and landlords with abatement expenses. Call your state agency to find out if financial assistance is available.

## Before you hire a lead abatement firm, ask for an explanation of how the work will be done.

A professional lead abatement firm may use one of these methods:

**Wet scraping**—scraping with misting to keep lead dust down.

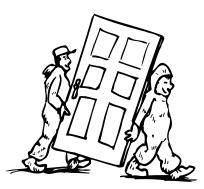
**Encapsulation**—using a special liquid coating to seal the painted surface.

**Enclosure**—resurfacing or covering surfaces (for example, with dry wall or exterior siding).

**Replacement**—removing and replacing building components such as doors, window frames, and wood trim.

#### **Chemical paint removers**

—using solvents or other chemicals to remove lead-based paint.



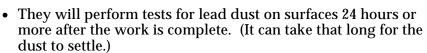
## The workers must use special equipment and follow strict precautions:

- They will make sure all the residents are out of the home until all the work, including a thorough cleanup, is completed (unless the work is in a very small area).
- They will remove or cover furniture, carpets, and other belongings before beginning.

 They will cover and seal off nonmoveable objects and floors.
 They will seal off doors and ducts with plastic sheeting.

 To clean up dust, they will use high-phosphate cleaner and High Efficiency Particulate Air (HEPA) vacuum cleaners (regular vacuum cleaners just blow lead dust back into the air).

 They will use respirators, coveralls, gloves, shoe covers, and other protective clothing when doing lead abatement work.



You can get more information about the U.S. Environmental Protection Agency's (EPA's) requirements for lead abatement firms. Call your EPA regional office, or the National Lead Information Center Clearinghouse (800-424-LEAD).

Are You Considering Renovations?

Many people who have had their home remodeled or renovated, or who have renovated their home themselves, have created a health problem for their families without realizing it.

Scraping or sanding lead-based paint, or using a torch or heat gun to remove lead-based paint, generates large amounts of lead dust and fumes. Lead dust from repairs and renovations can remain in the home long after the work is completed.



**Before you begin any renovations that might disturb painted surfaces in an older home** (such as scraping paint or tearing out walls), get your home tested for lead-based paint.

If you decide to hire someone to perform renovations in your home, EPA recommends using professionals with experience in dealing with the hazards associated with renovations in areas with lead-based paint. EPA recommends that individuals not perform renovations themselves in areas that have lead-based paint.

Beginning on April 28, 1996, anyone who is paid to renovate housing built before 1978 must give a copy of this brochure to the owner and occupants before starting work.

Basic precautions to protect yourself and your family during renovations (whether you decide you must do the work yourself or hire a renovator) include the following:

**Move your family (especially children and pregnant women)** to another apartment or house until the work is done and the area is properly cleaned.

**DON'T use a heat gum, torch, or electric sander on lead-based paint.** These will generate huge amounts of dust and fumes.



**Isolate work areas from nonwork areas** —use plastic coverings and tape to seal off entrances and ducts. Also use plastic and tape to protect furniture, carpets, rugs, and floors from paint dust and chips.

To keep dust down, wet surfaces before you work on them. Do not dry sand or scrape.



To keep from breathing in lead dust, wear a proper

**respirator.** You can contact a safety equipment supplier and ask what type of respirator is best for the work you are doing. Some hardware stores also carry respirators.

**Change and wash your clothes and shower** immediately after stopping work each day.



Avoid sweeping or vacuuming the work area with a household vacuum cleaner. This will only spread the lead dust around.

Clean up thoroughly at the end of each work day and after the renovations are done.

Dispose of the plastic carefully. Wait a day or so until the dust has settled, then wipe all surfaces in the work area with a solution of high-phosphate powdered automatic dishwasher detergent or TSP (change the water often) and use a HEPA vacuum cleaner. Then wipe and vacuum again.

**Remember**—it is not a good idea to do your own renovations in areas of your home that have lead-based paint. The lead dust you create can poison you and your family.



## Are You Buying or Renting a House or Apartment?

If you are **buying or renting** a house or apartment that was built before 1978, the seller, renter, or agent must disclose any information about the presence of lead-based paint in the house or apartment, and must give the buyer or renter a copy of this brochure.

Before **buying** a house, condominium, or other housing built before 1978, you are also entitled to up to 10 business days to conduct an inspection before you become obligated under a purchase and sale contract. In addition, the purchase contract must include a federal Lead Warning Statement.



For more complete information on your rights as a purchaser or lessee, or on your obligations as a landlord, seller, or agent, contact the Lead Information Clearinghouse.

Remember—before you rent, buy, or renovate housing built before 1978, it's a good idea to have the home inspected to find out if there is a lead-based paint hazard (especially if you have young children or are planning to have children).

## What Are Some Other Sources of Lead?

People can be exposed to lead in other ways besides through lead-based paint and dust:

**Lead in Soil.** Children can be exposed to lead if they play in soil that contains high levels of lead. Lead-contaminated soil and dust can also be tracked into the home.

Soil around a home might be contaminated with lead from chips and dust from exterior paint, or from exhaust from cars using leaded gasoline. (Although cars do not use leaded gasoline today, the lead from gasoline used in past years might remain in the soil.)



Call your state agency to find out about getting soil tested for lead, and to get advice if your soil has a high level of lead.



**On the Job.** If you work with lead, don't bring it home with you! Shower and change your clothes before coming home, and launder your clothes separately from those of other family members.

People are exposed to lead in a variety of industries, such as construction, lead abatement, smelting, battery manufacturing, automotive repair, and welding.

**Drinking water.** You might have too much lead in your drinking water if your home has plumbing containing lead or lead solder. Call your local health department or water supplier to find out how to get your water tested.

If you have lead in your household plumbing, take the following precautions:

• If you have not used the cold water for two hours or more, run it for 30 to 60 seconds before drinking it or using it for cooking. In many cases, this will flush out the standing water that has been in contact with lead. However, if your area has lead service lines, this may not reduce lead levels substantially.



• Hot water dissolves more lead than cold water does. Use only cold water for drinking, cooking, and mixing baby formula.

If lead service lines connect your home to the water main, contact your water supplier.

Some other sources of lead:

**Old toys and furniture** painted with lead-based paint.

**Food and liquids** stored in lead-glazed pottery or porcelain or in lead crystal.



**Air pollution** if you live near a battery plant, lead smelter, bridge undergoing repair, or other industry that releases lead into the air.

**Hobbies** that use lead, such as making pottery and stained glass, refinishing furniture, and using indoor firing ranges.

**Folk remedies** that contain lead, such as greta and azarcon used to treat an upset stomach.

# Do You Need More Information about Preventing Lead Poisoning?

**The National Lead Information Center** runs a toll-free hotline for information about how to protect children from lead poisoning. Call (800) LEAD-FYI.

The National Lead Information Center also runs a clearinghouse to provide information to government agencies, health professionals, lead abatement professionals, and the public. Call (800) 424-LEAD.

**EPA's Safe Drinking Water Hotline** can provide information about lead in drinking water. Call (800) 426-4791.

#### **State Agencies**

Some cities and states have their own requirements for lead-based paint activities. Check with your state agency listed below to see if state or local laws apply to you.

Your state agency can also provide information and assistance to prevent lead poisoning, such as information about testing for lead-based paint and finding a certified lead abatement firm. Some states can also give you information about financial assistance for lead abatement.

**NOTE:** The telephone numbers of the state agencies listed below change from time to time. Call the National Lead Information Center Hotline (800-LEAD-FYI) for an up-to-date list.

Alabama (205) 242-5766	Colorado(303) 692-2636
Alaska (907) 790-2169	Connecticut(203) 566-3122
Arizona (602) 230-5858	Delaware(302) 739-4735
Arkansas (501) 661-2592	District of Columbia(202) 727-9870
California (415) 744-1086	

#### DRAFT: For Comment Only

Florida(904) 488-3385	New Jersey (609) 292-5666
Georgia(404) 894-6644	New Mexico (505) 827-0006
Hawaii(808) 733-9022	New York(518) 473-4602
Idaho(208) 334-6584	North Carolina . (919) 733-0385
Illinois(800) 545-2200	North Dakota (701) 224-2493
Indiana(317) 633-0662	Ohio(614) 466-5332
Iowa(800) 972-2026	Oklahoma(405) 271-4471
Kansas(913) 296-0189	Oregon (503) 731-4000
Kentucky(502) 564-2154	Pennsylvania (717) 782-2884
Louisiana(504) 568-5070	Rhode Island (401) 277-3424
Maine(207) 287-3259	South Carolina (803) 737-4061
Maryland(410) 631-3859	South Dakota (605) 773-3364
Massachusetts(800) 532-9571	Tennessee(615) 741-5683
Michigan(517) 335-8892	Texas(800) 422-2956
Minnesota(612) 627-5017	Utah(801) 538-6191
Mississippi(601) 960-7463	Vermont (800) 439-8550 x7226
Missouri(800) 392-7245	Virginia(800) 523-4019
Montana(406) 444-3986	Washington (206) 753-2730
Nebraska(402) 471-0197	West Virginia (304) 558-0197
Nevada(702) 687-5240	Wisconsin (608) 266-5885
New Hampshire (603) 271-4507	Wyoming(307) 777-7957

### U.S. Environmental Protection Agency Regional Offices

**REGION 1** Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont

John F. Kennedy Federal Building One Congress Street Boston, MA 02203

(617) 565-3420

**REGION 2** New Jersey, New York, Puerto Rico, Virgin Islands

Jacob K. Javitz Federal Building 26 Federal Plaza New York, NY 10278

(212) 264-2657

**REGION 3** Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

841 Chestnut Building Philadelphia, PA 19107

(215) 597-9800

**REGION 4** Alabama, Florida, Georgia, Kentucky, Mississippi,

North Carolina, South Carolina, Tennessee

345 Courtland Street, N.E. Atlanta, GA 30365

(404) 347-4727

**REGION 5** Illinois, Indiana, Michigan, Minnesota, Ohio,

Wisconsin

77 West Jackson Boulevard Chicago, IL 60604

(312) 353-2000

**REGION 6** Arkansas, Louisiana, New Mexico, Oklahoma, Texas

First Interstate Bank Tower at Fountain Place 1445 Ross Avenue, 12th Floor, Suite 1200

Dallas, TX 75202-2733

(214) 655-6444

#### DRAFT: For Comment Only

**REGION 7** *Iowa, Kansas, Missouri, Nebraska* 

726 Minnesota Avenue Kansas City, KS 66101

(913) 551-7000

**REGION 8** Colorado, Montana, North Dakota, South Dakota,

Utah, Wyoming

999 18th Street, Suite 500 Denver, CO 80202-2405

(303) 293-1603

**REGION 9** Arizona, California, Hawaii, Nevada, American

Samoa, Guam

75 Hawthorne Street San Francisco, CA 94105

(415) 744-1305

**REGION 10** Alaska, Idaho, Oregon, Washington

1200 Sixth Avenue Seattle, WA 98101

(206) 442-1200

### For Additional Information:

Address and phone number of local program or organization.

